Message

From: Burke, NadiaHollan [Burke.NadiaHollan@epa.gov]

Sent: 12/31/2014 6:36:42 PM

To: Frank Vera Ex. 6 Personal Privacy (PP)

CC: Stone, Linda@Waterboards [linda.stone@waterboards.ca.gov]; Aycock, Mary [Aycock.Mary@epa.gov]; Battey,

Todd@Waterboards [Todd.Battey@waterboards.ca.gov]

Subject: FW: George AR # 1773 pesticide, dieldrin, site OT071

Attachments: 09-2256079.pdf

Frank—I was just informed by Linda that Todd Battey is working on the OT071 Site now. Attached is the report that I found, and the laboratory reports should be in Appendix B but I do not see them in this pdf based on a quick look. I recommend that you ask for a copy of this particular report in its entirety in your FOIA request to the AF.

Nadia Hollan Burke, Environmental Engineer Remedial Project Manager (Superfund) U.S. Environmental Protection Agency, Region IX 75 Hawthorne St. (SFD-8-1) San Francisco, CA 94105

Phone: 415-972-3187 Fax: 415-947-3526

E-mail: Burke.NadiaHollan@epa.gov

From: Burke, NadiaHollan

Sent: Wednesday, December 31, 2014 10:00 AM

To: 'Frank Vera'

Cc: Henning, Loren; Aycock, Mary; Esler, Eric; Stone, Linda@Waterboards

Subject: RE: George AR # 1773 pesticide, dieldrin, site OT071

Mr. Vera—I believe I may have located the document of the final results associated with the preliminary results that are being referred to in AR#1773, a final SAP Report for pesticides phase 2 investigation from 2002/2003. I have been unable to find a corresponding document in the AF AR database, so I have requested a copy of what we have from our records center to see if it is what you are looking for. I will need to review it prior to release since it is currently uncoded, but if it is a technical document, it's not likely to be withheld.

You have asked numerous questions in the last few e-mails regarding Site OT071 and the dieldrin/pesticide releases at George AFB. I will attempt to paraphrase your questions, and provide some general answers, below. However, it is my understanding that Linda Stone at the Water Board is the primary point of contact for this site, and any further concerns, questions, or comments regarding OT-71 should be directed to her. As you are aware, the current EPA RPM assigned to the George AFB Site is Mary Aycock. I am assisting Mary with requests for EPA documents, such as to respond to your information requests, but that is the extent of my current involvement with George AFB so I can't help much with your questions beyond finding documents that we might have not located in the AR.

Question 1: Does the EPA have the lab slips for this report [AR#1773] about Organochlorine Pesticides in Soil at the Base Housing?

EPA has located the following document in our records that may contain the laboratory data for the Phase 2 pesticide investigation referenced in AR#1773. I am in the process of retrieving it and reviewing it for release.

DOCID	DOC_DATE	TITLE	SITE_NAME	AUTHOR	ADDRESSEE	PAGES	ACCESS
		Final phase 2 pesticide			US Air Force -		
		investigation, SAP	GEORGE	Montgomery	Center for		
		addendum,	AIR FORCE	Watson	Environmental		
2256079	3/1/2003	w/Appendices A & B &	BASE	Harza	Excellence	155	UNC

	TL to J Bingham fr W McClellan, 3/24/2002			

Question 2: Are these levels extremely high?

Yes, these levels were far above our current EPA remedial Regional Screening Levels (RSLs)

http://www.epa.gov/region9/superfund/prg/index.html, but I am not sure what our screening levels were at the time of investigation. In any event, additional investigation was conducted on the soil and groundwater. The property required land use controls for the soils upon transfer due to their levels above acceptable exposure, and the Water Board is currently overseeing the Corrective Action Plan process for the groundwater contamination that resulted in the years of application of the pesticides. The State may have different numbers of reference for investigation and cleanup as well. I converted from mg/kg to ug/kg, so I hope my conversions are correct but this gives you an idea of the level of contamination.

Aldrin * Groundwater RSL: 0.75 ug/kg; Residential Soil RSL: 31 ug/kg	309-00-2	16,700	μg/kg
Chlordane * Groundwater RSL: 15 ug/kg; Residential Soil RSL: 1,800 ug/kg	143-50-0	24,100	μg/kg
alpha-Chlordane	5103-71-9	4,660	μg/kg
gamma-Chlordane	5566-34-7	5,330	μg/kg
Dieldrin * Groundwater RSL: 0.069 ug/kg; Residential Soil RSL: 33 ug/kg	60-57-1	15,000	μg/kg

Question 3: Considering the levels of aldrin and dieldrin at the George AFB Family Housing and that these pesticides were used liberally base wide for years hasn't more than 1 pound been entered the environment at George AFB?

Yes, I believe so.

Question 4: How did the AF dispose of the aldrin and dieldrin when the AF stopped using it?

I don't know this off-hand, but would assume this is well documented in the AR reports associated with this Site. The Water Board may have more historical knowledge of where this information might be located.

Question 5: Was the National Response Center notified?

I don't know and would have to review records, but I doubt it. By the time they released over the amount for reporting, I am not sure they would have been aware that it had reached that level, or if the requirement for reporting was even in place at the time it reached the extent of contamination it did, since historic disposal practices were done prior to most regulations about reporting. Generally, the historical releases of hazardous substances at the George AFB Site resulted in widespread soil and groundwater contamination, and were sufficient to list the site on the NPL, and require investigation and cleanup according to the CERCLA process. These subsequent investigation and decision documents are available in the AR. In the case of OT-071, currently the groundwater contamination is overseen by the Water Board, and they have a significant amount of documents available for public review associated with this site. They may even have public comment period associated with this process, but you would need to check with Linda to see when the appropriate time for that is.

Nadia Hollan Burke, Environmental Engineer Remedial Project Manager (Superfund) U.S. Environmental Protection Agency, Region IX 75 Hawthorne St. (SFD-8-1) San Francisco, CA 94105

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E-mail: Burke.NadiaHollan@epa.gov

From: Frank Vera Ex. 6 Personal Privacy (PP)

Sent: Tuesday, December 30, 2014 2:27 PM

To: Burke, NadiaHollan

Subject: RE: George AR # 1773

Hi Nadia,

I have a copy of George AR # 1773 "Training within the former George Housing Area" See: George AR # 1773 on Google Drive

It has a summary but no lab slips. I have contacted Lahontan RWB and they do not have the lab slips.

I was hoping the EPA had them. I will file a FOIA with the AF, but they are not releasing anything to me.

Are these levels extremely high?

Aldrin *	309-00-2	16,700	μg/kg
Chlordane *	143-50-0	24,100	μg/kg
alpha-Chlordane	5103-71-9	4,660	μg/kg
gamma-Chlordane	5566-34-7	5,330	μg/kg
Dieldrin *	60-57-1	15,000	μg/kg

Happy New Year!!

Frank

From: Burke, NadiaHollan [mailto:Burke.NadiaHollan@epa.gov]

Sent: Tuesday, December 30, 2014 1:50 PM

To: Frank Vera

Subject: RE: George AR # 1773

Hi Frank, Happy New Year (almost)! I will look into this and let you know...what's your timeframe? Have you tried looking at the Water Board geotracker database for the original report? They probably have a more comprehensive file on the base housing pesticide site because they are the lead regulator on that.

Anyway, I will see if we have a copy of this report or any type of lab data associated with this sampling. If we don't have anything, then the appropriate agency to request this information from the AF would be the Water Board. However, if you've already tried that let me know, and I can talk to the George team about the next steps for gathering information.

Nadia Hollan Burke, Environmental Engineer Remedial Project Manager (Superfund) U.S. Environmental Protection Agency, Region IX 75 Hawthorne St. (SFD-8-1) San Francisco, CA 94105

Phone: 415-972-3187 Fax: 415-947-3526

E-mail: Burke.NadiaHollan@epa.gov

From: Frank Vera [mailto: Ex. 6 Personal Privacy (PP) Sent: Tuesday, December 30, 2014 10:52 AM

To: Burke, NadiaHollan **Subject:** George AR # 1773

Nadia Hollan Burke (415) 972-3187 burke.nadiahollan@epa.gov

Hi Nadia,

I have the "George AR # 1773"

Does the EPA have the lab slips for this report about Organochlorine Pesticides in Soil at the Base Housing?

Can you ask the Air Force for them?

They are not in the Air Force Administrative Record.

Compound	CAS	Highest	Units	Location	Collection	Page	EPA
	Number				Date		Banned
Aldrin *	309-00-	16,700	μg/kg	SS-37	11/20/2002	4 of	1987
	2					5	
Chlordane *	143-50-	24,100	μg/kg	SS-51	11/21/2002	5 of	1988
	0					5	
alpha-Chlordane	5103-	4,660	μg/kg	SS-51	11/21/2002	5 of	
	71-9					5	
gamma-Chlordane	5566-	5,330	μg/kg	SS-51	11/21/2002	5 of	
	34-7					5	
p,p'-DDT *	50-29-3	31.4	μg/kg	SS-41	11/20/2002	4 of	1972
						5	
p,p'-DDD	72-54-8	4.9	μg/kg	SS-40	11/20/2002	4 of	
						5	
p,p'-DDE	72-55-9	24.5	μg/kg	SS-40	11/20/2002	4 of	
						5	
Dieldrin *	60-57-1	15,000	μg/kg	SS-37	11/20/2002	3 of	1987
						5	
Endosulfan sulfate *	115-29-		μg/kg	SS-23			
	7						
Alpha endosulfan	959-98-		μg/kg	SS-23			
	8						
Beta endosulfan	33213-		μg/kg	SS-23			
	65-9						
Endrin *	72-20-8	58	μg/kg	SS-37	11/20/2002	4 of	1986
						5	
Endrin aldehyde	7421-	0.68	μg/kg	SS-35	11/20/2002	3 of	
	93-4					5	

Heptachlor *	76-44-		μg/kg				1988
	8						
Heptachlor epoxide	1024-	2	μg/kg	SS-53	11/21/2002	5 of	
	57-3					5	
Lindane gamma-BHC *	58-89-9	1.6	μg/kg	SS-56	11/21/2002	5 of	Pesticide
						5	use
							2007
alpha-BHC	319-		μg/kg				
	84-6						
beta-BHC	319-85-		μg/kg				
	7						
delta-BHC	319-86-		μg/kg				
	8						
Methoxychlor	72-43-5		μg/kg				2003
Toxaphene *	8001-		μg/kg				1990
	35-2						
Persistent organic pollutants (POPs) *	·		Ł		I	

μg/kg - micrograms per kilogram

Concentrations of chemicals in soil measured in units of the mass of chemical (micrograms, ug) per mass of soil (kilogram, kg)

See pages 3 to 7: https://docs.google.com/file/d/0B 5VyEjCWkgBcEllcTFHZmNtQlk/view?pli=1

Thanks, Frank